C:\Documents and Settings\jkavanagh\Local Settings\Temporary Internet Files\Content.IE5\L7SQKHYJ\MC900361222[1].wmfName: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
Period: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**The Battle in Alphabet Soup**

1. Find a partner.
2. Review your Alphabet Speed Soup slide.
3. Fill out the first 2 columns for you and your partner’s objects.
4. Look up the mass of each object. Make sure the masses are both in the same units!
5. Calculate the momentum of both objects.   
     
    momentum = mass x velocity

|  |  |  |  |
| --- | --- | --- | --- |
| Object | Speed (velocity) | Mass | Momentum |
|  |  |  |  |
|  |  |  |  |

Analysis –

Draw a picture below showing both objects before they collide head on.  
Label your picture with the object’s names and the initial momentum of each object.

Draw a picture below showing both objects after they collide.

Draw arrows to show which direction each object goes after the collision.

Make the size of the arrows match the amount of movement you think each object would have.